(12)

## **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: **30.07.2008 Bulletin 2008/31** 

(51) Int Cl.: *H04N 7/169* (2006.01)

- (43) Date of publication A2: 28.05.2008 Bulletin 2008/22
- (21) Application number: 08002037.3
- (22) Date of filing: 30.06.2003
- (84) Designated Contracting States:

  AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
  HU IE IT LI LU MC NL PT RO SE SI SK TR
- (30) Priority: 28.06.2002 GB 0215040
- (62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: 03761701.6 / 1 532 814
- (71) Applicant: Dwight Cavendish Systems Limited Stevenage, Herts SG1 1AH (GB)

- (72) Inventors:
  - Tan, Baolin Stevenage Herts SG1 1AH (GB)
  - Abdin, Mazen
     Stevenage Herts SG1 1AH (GB)
- (74) Representative: Reeve, Nicholas Edward
   Reddie & Grose
   16 Theobalds Road
   London WC1X 8PL (GB)

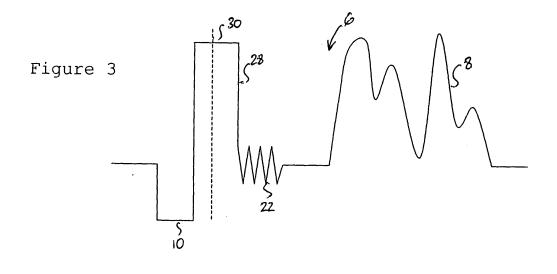
## (54) An improved method and apparatus for providing an anti-copy video signal

(57) A anti-copy programme signal is provided. Copies of the anti-copy video pulses made on a video recorder experience reduced quality and interference in playback making them unpleasant to watch. The uncopied signal can be viewed without any material effect on picture quality.

The signal comprises a pulse 28 added to each line 6 of the signal throughout both the visible picture region and throughout the vertical blanking region 12, as well

as a first modulated wave-form 34 added to the vertical synchronisation pulses 16 of the signal and a second modulated wave-form 36 added to several lines 6 of the picture signal before the vertical blanking section 12.

The presence of all three of these features together has been found to be provide a surprising accumulative effectiveness in causing interference in the reproduction of the modified video signal during playback of the copied video signal, that is greater than the effectiveness provided by the different features taken separately.





## **EUROPEAN SEARCH REPORT**

Application Number EP 08 00 2037

|          | Citation of document with it   | ndication, where appropriate,  | Relevant   | CLASSIFICATION OF THE              |  |  |
|----------|--|--|--|------------------------------------|--|--|
| Category | of relevant pass   |  | to claim   | APPLICATION (IPC)                  |  |  |
| X        | LTD. CANTERBURY, GE vol. 23, no. 260, 1 November 1997 (19 XP000742706 ISSN: 0268-4519 * page 29, column 3 figure 1 * page 30, column 2 | S, ELEKTOR PUBLISHERS 3, 997-11-01), pages 28-33, 8 - page 30, column 1; | 1-76   | INV.<br>H04N7/169                  |  |  |
| A        | EP 0 831 648 A (SON<br>25 March 1998 (1998<br>* abstract *   |  | 1-76   |                                    |  |  |
| Α        | GB 1 571 386 A (IVS<br>16 July 1980 (1980-<br>* the whole documer  | -07-16)  | 1-76   |                                    |  |  |
|          |  |  |  | TECHNICAL FIELDS<br>SEARCHED (IPC) |  |  |
|          |  |  |  | HO4N                               |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          |  |  |  |                                    |  |  |
|          | The present search report has  | been drawn up for all claims   |  |                                    |  |  |
|          | Place of search  | Date of completion of the search   |  | Examiner                           |  |  |
|          | Munich   | 2 June 2008  | Sch  | nneiderlin, Jean                   |  |  |
| C/       | ATEGORY OF CITED DOCUMENTS   | T : theory or princip  | le underlying the  | invention                          |  |  |
|          | icularly relevant if taken alone   | E : earlier patent do<br>after the filing da                             | ite  | shed on, or                        |  |  |
|          | icularly relevant if combined with anot<br>ument of the same category  | L : document cited t   | D : document cited in the application     L : document cited for other reasons     : |                                    |  |  |
|          | nological background   |  |  |                                    |  |  |

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 08 00 2037

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-06-2008

| Patent document cited in search report |  | Publication<br>date |                | Patent family member(s)               | Publication<br>date                    |  |  |  |  |
|--|--|---------------------|----------------|---------------------------------------|--|--|--|--|--|
| EP 0831648                             | A  | 25-03-1998          | CN<br>JP<br>US | 1183005 A<br>10093914 A<br>6266480 B1 | 27-05-1998<br>10-04-1998<br>24-07-2001 |  |  |  |  |
| GB 1571386                             | Α  | 16-07-1980          | NONE           |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
|  |  |                     |                |                                       |  |  |  |  |  |
| 20                                     |  |                     |                |                                       |  |  |  |  |  |
| ייי ווארט                              |  |                     |                |                                       |  |  |  |  |  |
| 〔                                      | or more details about this annex : see Official Journal of the European Patent Office, No. 12/82 |                     |                |                                       |  |  |  |  |  |